## **Case 3639**

Krynickillus maculatus Kaleniczenko, 1851 (currently Limax maculatus; Gastropoda, Stylommatophora, LIMACIDAE): proposed conservation of the specific name

## Igor Balashov

Schmalhausen Institute of Zoology, National Academy of Sciences of Ukraine, B. Khmelnytsky str. 15, Kiev, 01601, Ukraine (e-mail: igor\_balashov@ukr.net)

**Abstract.** The purpose of this application, under Article 81.2.1 of the Code, is to conserve the specific name of the terrestrial slug *Krynickillus maculatus* Kaleniczenko, 1851 (currently *Limax maculatus* or *Limacus maculatus*, LIMACIDAE) by suppression of its little-used senior homonyms *Limax maculatus* Nunneley, 1837 and *Limax cinereus* var. *maculatus* Picard, 1840, for the sake of nomenclatural stability and universality.

**Keywords.** Nomenclature; taxonomy; Gastropoda; Stylommatophora; Limacidae; *Limax*; *Limax maculatus*; *Krynickillus maculatus*; *Limacus maculatus*; terrestrial slug; Europe.

- 1. Limax maculatus Nunneley, 1837 (p. 46) was expressly proposed as a synonym of Limax maximus Linnaeus, 1758. The new name was thought to be 'more descriptive of its appearance' than L. maximus, however this name was never used as valid (even by Nunneley himself who referred to his specimen of a terrestrial slug from Leeds, England as 'the second species') until Cockerell (1923, p. 27) who established it as Limax maximus var. maculatus (Nunneley) and applied it to the morph of the slug dissected and described by Nunneley (1837). According to Article 11.6 of the Code L. maculatus Nunneley, 1837 was an unavailable name, having been proposed in the synonymy of a name then used as valid, but Cockerell's subsequent usage made it available with its original author and date (Article 11.6.1). Synonymy with Limax maximus Linnaeus, 1758 has generally been assumed, although Taylor (1907, pp. 34, 78) included different figures of Nunneley (1837) in the synonymies of both Limax maximus Linnaeus, 1758 and L. flavus Linnaeus, 1758.
- 2. Picard (1840, p. 165) somewhat unconventionally described a new 'variety' of Limax cinereus Müller, 1774 (L. maximus Linnaeus, 1758 being included in the synonymy) as 'Var a. L. maculatus nob.' with a brief description in Latin. L. maculatus Picard, 1840 is considered to represent a different taxon from L. maculatus Nunneley, 1837, although Hesse (1926, pp. 76–77) used the name Limax maculatus Nunneley, 1837 as a junior synonym of Limax maximus Linnaeus, and Limax maculatus Picard (spelled as 'maculata') as a variety of Limax maximus.
- 3. The name Krynickillus maculatus Kaleniczenko, 1851 (p. 226) was introduced for a new terrestrial slug species from the Crimea (Ukraine). This species was subsequently assigned to Limax (Likharev & Wiktor, 1980) and until 2001 it was widely used in this combination for the species in the Crimea and Caucasus and other regions of the world where it was introduced as a pest. Wiktor (2001) revealed the

secondary homonymy of *Limax maculatus* (Kaleniczenko, 1851) with *Limax maculatus* Nunneley, 1837 and in compliance with Articles 57.3.1 and 59 of the Code replaced it with the next available synonym *Limax ecarinatus* Boettger, 1881, which prior to that had not been used as a valid species name. This was not the best solution because the usage of the well-established name *Limax maculatus* (Kaleniczenko, 1851) could have been conserved under Article 23.9.2 of the Code.

- 4. Limax maculatus (Kaleniczenko, 1851) (currently Limax ecarinatus Boettger, 1881) is one of the two recognized species of Limacus Lehmann, 1864, a disputed group considered by some authors as a subgenus of Limax Linnaeus, 1758 (Likharev & Wiktor, 1980; Wiktor, 2001; Sysoev & Schileyko, 2009; Welter-Schultes, 2012; Welter-Schultes & Audibert, 2013 and others) and by other authors as a separate genus close to Limax (Forcart, 1986; Reischütz, 1986; Falkner et al., 2001; Nitz et al., 2009; Horsák et al., 2010; Bank, 2011; Balashov & Gural-Sverlova, 2012 and others). Before and after 2001 both combinations, Limax maculatus (Kaleniczenko, 1851) and Limacus maculatus (Kaleniczenko, 1851), were used frequently. L. maculatus (Kaleniczenko, 1851) (or Limax ecarinatus Boettger, 1881) is a pest and an introduced species, and has been featured in many publications. After 2001 it was variously referred to as Limax ecarinatus Boettger, 1881, Limacus maculatus (Kaleniczenko, 1851) (as per Article 59.4 of the Code) and Limax maculatus (Kaleniczenko, 1851). None of these combinations appear to be prevalent, although Limax ecarinatus has been the least used. Welter-Schultes & Audibert (2013) used the combination Limax ecarinatus and argued that 'both names are correct, this depends on taxonomic classification' and 'those who follow the system used by Falkner et al. (2001) must use the name Limacus maculatus (Kaleniczenko, 1851)', as per Article 59.4 of the Code. However, this will only increase confusion.
- 5. Nomenclatural stability in this case would be better achieved if the Commission were to rule under Article 81.2.1 to suppress the underused names *Limax maculatus* Nunneley, 1837 and *Limax maculatus* Picard, 1840, thereby conserving the most junior homonym *Krynickillus maculatus* Kaleniczenko, 1851, which is widely used. A list of 50 examples of usage in 1980–2013 is kept by the Commission Secretariat.
  - 6. The International Commission on Zoological Nomenclature is accordingly asked:
  - (1) to use its plenary power to rule that the following names are suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy:
    - (a) maculatus Nunneley, 1837, as published in the binomen Limax maculatus;
    - (b) maculatus Picard, 1840, as published in the combination Limax cinereus var. maculatus;
  - (2) to place on the Official List of Specific Names in Zoology the name *maculatus* Kaleniczenko, 1851, as published in the binomen *Krynickillus maculatus*;
  - (3) to place on the Official Index of the Rejected and Invalid species in Zoology the following names:
    - (a) maculatus Nunneley, 1837, as published in the binomen Limax maculatus and as suppressed in (1)(a) above;
    - (b) maculatus Picard, 1840, as published in the combination Limax cinereus var. maculatus and as suppressed in (1)(b) above.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the I.C.Z.N. Secretariat, Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).